

19



Europäisches Patentamt
European Patent Office
Office européen des brevets

11 Publication number:

**0 259 105
A3**

12

EUROPEAN PATENT APPLICATION

21 Application number: **87307614.5**

51 Int. Cl.⁴: **C07C 41/06 , C07C 43/04 ,
B01J 27/053 , B01J 21/06**

22 Date of filing: **27.08.87**

30 Priority: **03.09.86 GB 8621263**

43 Date of publication of application:
09.03.88 Bulletin 88/10

84 Designated Contracting States:
BE DE FR GB IT NL SE

88 Date of deferred publication of the search report:
15.03.89 Bulletin 89/11

71 Applicant: **The British Petroleum Company
p.l.c.
Britannic House Moor Lane
London EC2Y 9BU(GB)**

72 Inventor: **Atkins, Martin Philip
The British Petroleum Company p.l.c.
Chertsey Road
Sunbury-on-Thames Middlesex, TW16
7LN(GB)**
Inventor: **Bail, William John
The British Petroleum Company p.l.c.
Chertsey Road
Sunbury-on-Thames Middlesex, TW16
7LN(GB)**
Inventor: **Smith, David John Harry
The British Petroleum Company p.l.c.
Chertsey Road
Sunbury-on-Thames Middlesex, TW16
7LN(GB)**

74 Representative: **Richardson, Derek et al
BP INTERNATIONAL LIMITED Patents &
Agreements Division Chertsey Road
Sunbury-on-Thames Middlesex TW16
7LN(GB)**

54 **Proton catalysed reactions.**

EP 0 259 105 A3

57 Processes for carrying out proton-catalysed reactions are carried out in the presence of a solid acidic catalyst which is a metal oxide containing surface acid groups obtainable by treating a solid metal oxide containing residual hydroxyl groups with an acid, or a mixture of metal oxides so-obtainable. Particularly useful metal oxides are zirconia and stannic oxide.



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
A	WO-A-8 101 845 (THE BRITISH PETROLEUM) * claims 1,28; & EP - A - 31252 (cat. D) *	1,7	C 07 C 41/06 C 07 C 43/04 B 01 J 27/053 B 01 J 21/06
A	DE-A-2 721 203 (GULF OIL CANADA) * claim 1 *	7	
A,D	US-A-4 487 976 (D. FARCASIU) * claims 1,8,24 *	3,5,7	
A	US-A-4 406 821 (D. FARCASIU) * claims 1,5,8; column 1, lines 5-10 *	3,5,7	
A	US-A-4 242 526 (J. LAKY et al.) * claim *	5,8	
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			B 01 J 21/06 B 01 J 23/14 B 01 J 27/053 B 01 J 37/02 B 01 J 38/60 C 07 C 41/06 C 07 C 43/04
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 12-12-1988	Examiner KNAACK
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			
T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			